

Title (en)  
Surface plasmon sensor

Title (de)  
Oberflächenplasmonensensor

Title (fr)  
Capteur de plasmons de surface

Publication  
**EP 1650547 A3 20091125 (EN)**

Application  
**EP 06001540 A 19970429**

Priority  

- EP 97107066 A 19970429
- JP 10939896 A 19960430
- JP 11989296 A 19960515
- JP 14169896 A 19960604
- JP 23386496 A 19960904
- JP 23386896 A 19960904

Abstract (en)  
[origin: EP0805347A2] A surface plasmon sensor comprises a prism, a metal film, which is formed on one surface of the prism and is brought into contact with a sample, and a light source for producing a light beam. An optical system causes the light beam to pass through the prism and to impinge upon an interface between the prism and the metal film such that various different angles of incidence may be obtained with respect to the interface. A photodetector detects an intensity of the light beam, which has been totally reflected from the interface, with respect to each of the various different angles of incidence. An electrode stands facing the metal film with a liquid sample intervening therebetween, and a DC voltage is applied across the electrode and the metal film. A substance contained in the liquid sample is thus analyzed quickly and with a high sensitivity.  
<IMAGE>

IPC 8 full level  
**G01N 21/55** (2006.01); **G01N 21/21** (2006.01); **G01N 21/25** (2006.01); **G01N 27/447** (2006.01)

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**G01N 21/211** (2013.01 - EP US); **G01N 21/553** (2013.01 - EP US); **G01N 21/648** (2013.01 - EP US); **G01N 27/44721** (2013.01 - EP US)

Citation (search report)  

- [XYD] JP H06167443 A 19940614 - OLYMPUS OPTICAL CO, et al
- [Y] EP 0395222 A2 19901031 - AMERSHAM INT PLC [GB]

Cited by  
RU2487338C2; EP1972927A1; US9658219B2; US11243199B2; US11402374B2

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AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

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AL LT LV RO SI

DOCDB simple family (publication)  
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EP 1650550 A3 20091125; EP 1650550 B1 20121017; US 5856873 A 19990105; US 5907408 A 19990525; US 5917608 A 19990629

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**EP 97107066 A 19970429**; EP 06001540 A 19970429; EP 06001541 A 19970429; EP 06001542 A 19970429; EP 06001543 A 19970429;  
US 6911898 A 19980429; US 6911998 A 19980429; US 84162097 A 19970430